

I CLAIM,

1. A motorized scaffold for self-displacement on land, said scaffold comprising a motorized support base mounted on traction means for displacement on land, means to immobilize and level said support base at a desired location, a platform assembly secured over said support base on extendable support means, displaceable bracing means secured between said support base and said platform assembly to maintain said platform assembly substantially stable during displacement thereof and at a stationary desired working elevation with respect to said support base, and a displaceable worker support platform secured to said platform assembly for supporting workers thereon.

2. A motorized scaffold as claimed in claim 1 wherein said displaceable bracing means is constituted by bracing cables secured at one end to said platform assembly and at an opposed end to cable winding means secured to said support base to maintain said cables taut during displacement of said platform assembly and while said platform assembly is stationary at said desired working elevation.

3. A motorized scaffold as claimed in claim 2 wherein said bracing cables are wound about a variable size storage cable loop mechanism of said cable winding means, said cable loop being formed by guiding windings of said cable loop between a pair of parallel mounted cable support spools, one of said spools being a displaceable spool and the other a stationary spool, said displaceable spool being secured to pressure biasing means, a terminal end of said bracing cables being immovably secured to said support base.

4. A motorized scaffold as claimed in claim 3 wherein said pressure biasing means is a piston cylinder which applies a pressure against said displaceable spool,

said pressure being inferior to the pressure of extendable cylinders constituting said extendable support means.

5. A motorized scaffold as claimed in claim 4 wherein said bracing cables comprise vertical corner bracing cables, said platform assembly having a rectangular support frame, said corner bracing cables being secured to a respective corner of said rectangular support frame and depending from and along a vertical guide path and about guide pulleys to align said bracing cables with a respective one of four cable loops wound about said spools.

6. A motorized scaffold as claimed in claim 5 wherein said bracing cables further comprise cross-cables, each said cross-cables being secured to a respective one of said corners of said rectangular support frame, said support base being a rectangular support base, said platform assembly being supported in substantially parallel planar alignment with said support base, said cross-cables extending along a diagonal guide path between opposed ends of said support base and said rectangular support frame by guide pulleys and being wound with a respective one of four cable loops wound about said spools of a second one of said variable size storage cable loop of said cable winding means.

7. A motorized scaffold as claimed in claim 6 wherein said bracing cables further comprise a pair of lateral bracing cables, each cable of said pair being secured to said rectangular support frame in a central area thereof and guided thereunder by pulleys along an angular guide path extending to opposed ends of said support base at substantially mid-length thereof and wound about a respective cable loop wound about said spools of said second one of said variable size storage cable loop of said cable winding means.

8. A motorized scaffold as claimed in claim 4 wherein said piston has an oil pressure conduit connected to a control valve, said extendible cylinders having oil pressure conduits also connected to said control valve and to an oil pressure supply, said pressure in said conduit connected to said piston when falling to a predetermined pressure value causing said control valve to close to arrest said extendable hydraulic cylinders.

9. A motorized scaffold as claimed in claim 1 wherein said displaceable worker support platform is a laterally extendable worker support platform.

10. A motorized scaffold as claimed in claim 9 wherein said worker support platform is secured to an articulated support frame secured to said platform assembly.

11. A motorized scaffold as claimed in claim 10 wherein said platform assembly further comprises a material storage and work area defined by a support rectangular floor structure, said articulated support frame permitting displacement of said worker support platform upwardly and downwardly from a longitudinal front edge of said floor structure.

12. A motorized scaffold as claimed in claim 11 wherein said articulated support frame is provided on opposed sides of said rectangular floor, said worker support platform being an elongated rectangular platform having floor support braces and opposed vertical connecting arms, said articulated support frame having a vertical connecting post secured to opposed sides of said floor structure, a pivotal support arm pivotally connected at one end to a lower end of an associated one of said vertical connecting posts and at an opposed end to an associated one of a vertical connecting arm pivotally connected to an outermost one of said worker support platform telescoping frames, and

a links rod also pivotally connected between said vertical connecting post and said vertical connecting arm and disposed parallel to said pivotal support arm, and a piston cylinder pivotally connected at a piston rod end to said pivotal support arm and at a piston cylinder end to said vertical connecting post, said pistons being actuated in tandem to displace said outmost floor support brace upwardly and downwardly from said longitudinal edge of said floor structure while maintaining said worker support platform horizontal.

13. A motorized scaffold as claimed in claim 10 wherein said articulated support frame is displaceably secured to said platform assembly.

14. A motorized scaffold as claimed in claim 13 wherein said articulated support frame is provided on opposed sides of said rectangular floor, said opposed sides being provided with guide tracks, each said articulated support frame having a connecting post mounted on a respective one of said guide tracks, and means to displace and arrest said connecting post along said guide track to position said worker support platform to and away from a longitudinal front edge of said rectangular floor and at a retracted position over a portion of said rectangular floor.

15. A motorized scaffold as claimed in claim 14 wherein there is further provided a bridge floor slidably and extendable from said longitudinal edge of said rectangular floor.

16. A motorized scaffold as claimed in claim 9 wherein said worker support platform is comprised of elongated telescoping rectangular frames, each frame having a floor to support workers, said telescoping frames being extendable from opposed ends of said worker support

platform, said telescoping frames and a load thereon being counter-balanced by said bracing means.

17. A motorized scaffold as claimed in claim 11 wherein said material storage and work area is provided with a retractable canopy displaceably secured thereabove to shield worker from inclement weather conditions.

18. A motorized scaffold as claimed in claim 1 wherein said traction means is secured to said support base by a swivel connection whereby said support base can be positioned at a desired angle with respect to said traction means.

19. A motorized scaffold as claimed in claim 18 wherein said swivel connection is a circular disc gear connected to a pinion gear rotatable by a drive motor.

20. A motorized scaffold as claimed in claim 18 wherein said traction means is constituted by a pair of ground engaging endless traction belts each trained between and about a pair of wheels.

21. A motorized scaffold as claimed in claim 1 wherein said means to immobilize and level said support base is constituted by four hydraulic jacks secured to a respective corner of said support base, said support base being a rectangular support base.

22. A motorized scaffold as claimed in claim 21 wherein a control panel is accessible from a drive station of said support base when said platform assembly is at a lowered position to displace said scaffold on land and to operate said hydraulic jacks and extendable support means.

23. A motorized scaffold as claimed in claim 22 wherein a further control panel is accessible from said

platform assembly to operate said displaceable worker support platform and said extendable support means.

24. A motorized scaffold as claimed in claim 11 wherein there is further provided a compressor and electrical supply at said work area for operating hand operable tools and material working machinery.